NORDIC INVESTMENT BANK
Port-Net workshop

Development of Transport and Logistics in Baltic Sea Area and Financing of related Investments

11 - 15 June 2007, Hamina
Workshop (WS02-5):
Port Financing II

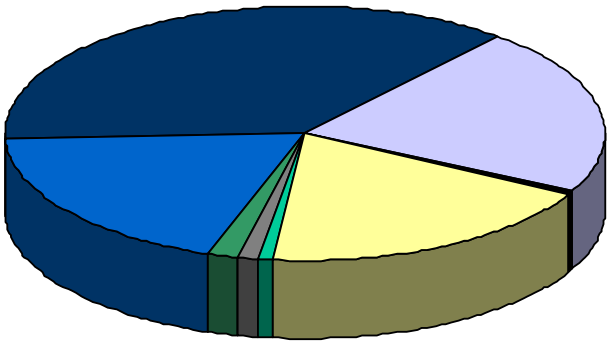
Lauri Johnson
Vice President,
Baltic countries
lauri.johnson@nib.int

NORDIC INVESTMENT BANK

	Share	Moody's	S&P
NIB		**Aaa**	**AAA**
Denmark	21%	Aaa	AAA
Estonia	1%	A1	A
Finland	18%	Aaa	AAA
Iceland	1%	Aaa	AA-
Latvia	1%	A2	A-
Lithuania	2%	A2	A
Norway	19%	Aaa	AAA
Sweden	37%	Aaa	AAA

OWNERSHIP STRUCTURE

The Bank's member countries have subscribed to its authorised capital in proportion to their gross national income.



- Denmark, 21.3%
- Estonia, 0.7%
- Finland, 18.5%
- Iceland, 0.9%
- Latvia, 1.1%
- Lithuania, 1.6%
- Norway, 19.1%
- Sweden, 36.7%

MISSION

NIB promotes **sustainable growth** of its Member Countries by providing long-term complementary financing, based on sound banking principles, to projects that strengthen competitiveness and enhance the environment.

NIB'S RELATIVE STRENGTHS

- Status as an **International Financial Institution**, which facilitates the financing of cross-border activities and strengthens the possibilities to manage risks;
- **Highest possible credit rating**, which emanates from high asset quality, a strong balance sheet and ownership, and enables a stable supply of long-term financing;
- Experience in **complex financing structures** in cooperation with other International Financial Institutions and public and private sector lenders; and
- Professional and highly motivated staff.

STRATEGY

- NIB promotes **competitiveness** and supports the **environment** by providing financing in the form of loans and guarantees.

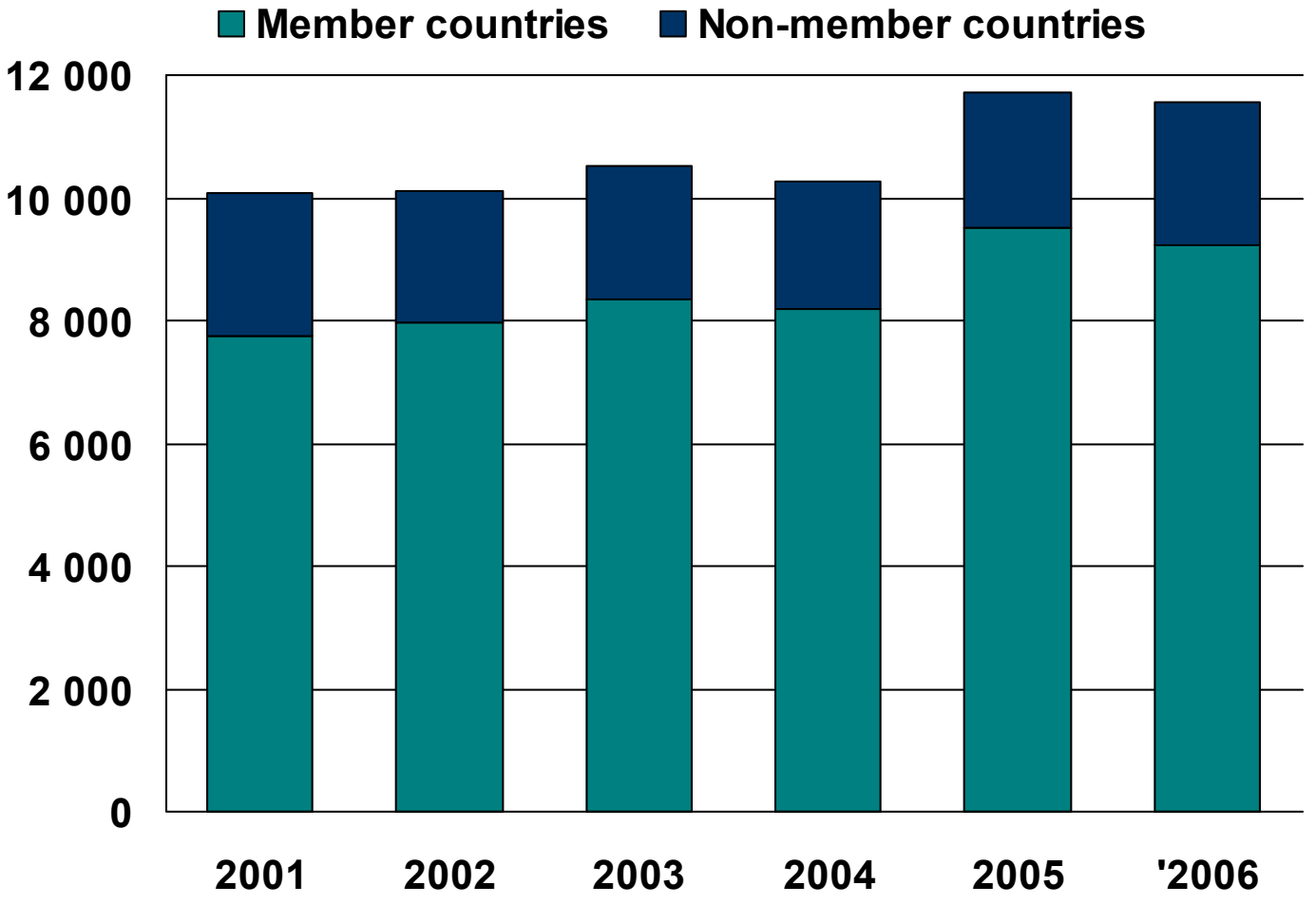
- NIB remains flexible in terms of supporting different areas of the economy but puts particular emphasis on projects involving:

- investments in infrastructure;
- investments improving the environment;
- large investments by the corporate sector; and
- small and medium-sized enterprises, targeted in cooperation
- with financial intermediaries.

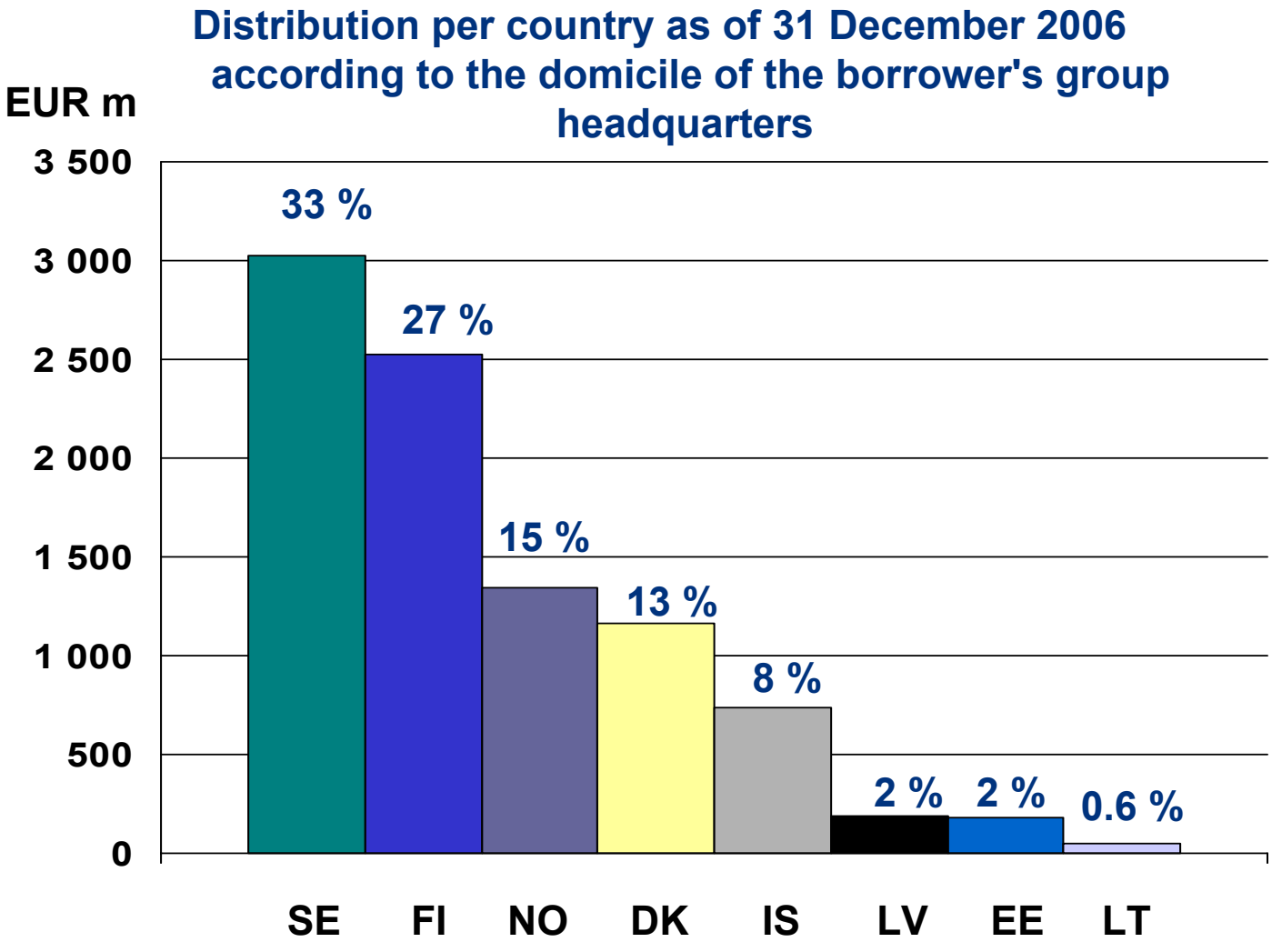
NORDIC INVESTMENT BANK—TODAY

- Head office in Helsinki; offices in Copenhagen and Singapore "cold offices" in Stockholm, Oslo and Reykjavik
- Loans outstanding in 37 countries
- Borrowing outstanding in 20 currencies

LOANS OUTSTANDING

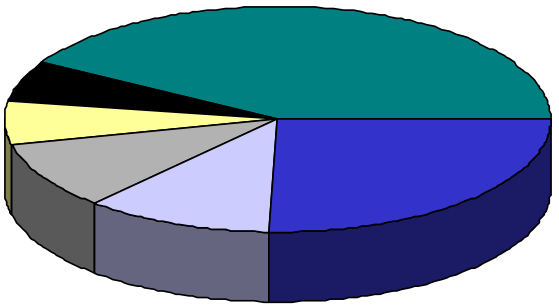


LOANS OUTSTANDING — MEMBER COUNTRIES



LOANS OUTSTANDING—MEMBER COUNTRIES

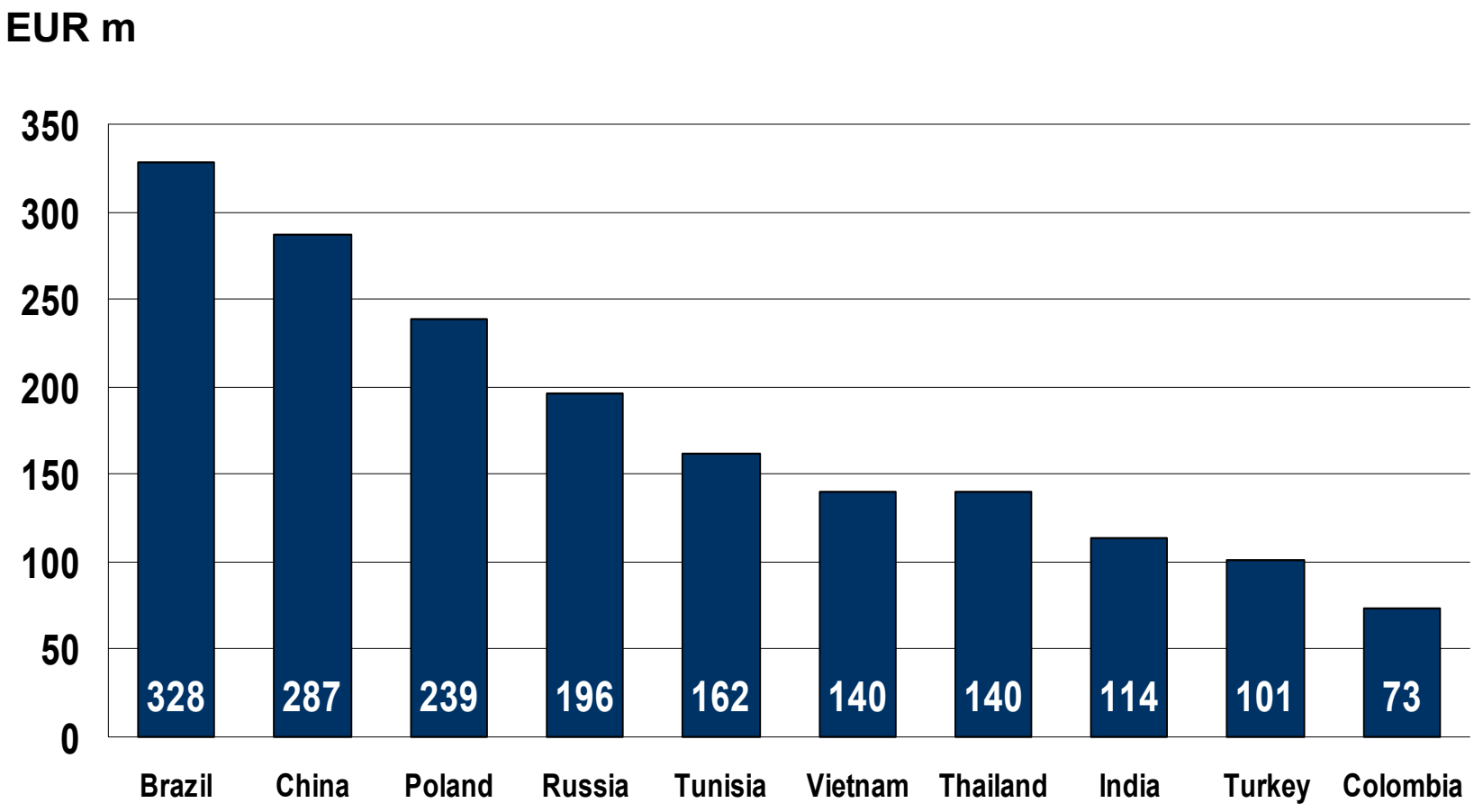
Sectoral distribution as of 31 December 2006



- Manufacturing, 42%
- Energy, 26%
- Transport and communications, 11%
- Bank and finance, 10%
- Trade and services, 6%
- Others, 6%

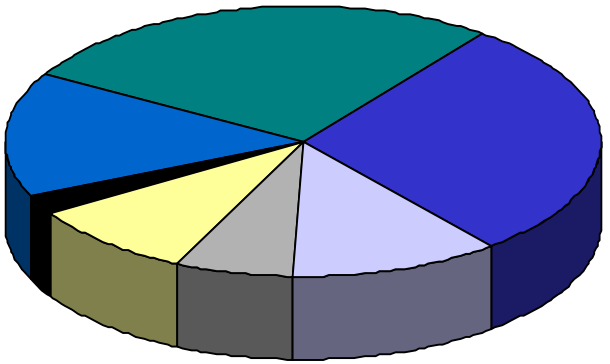
LOANS OUTSTANDING — NON-MEMBER COUNTRIES

10 largest borrowing countries as of 31 December 2006



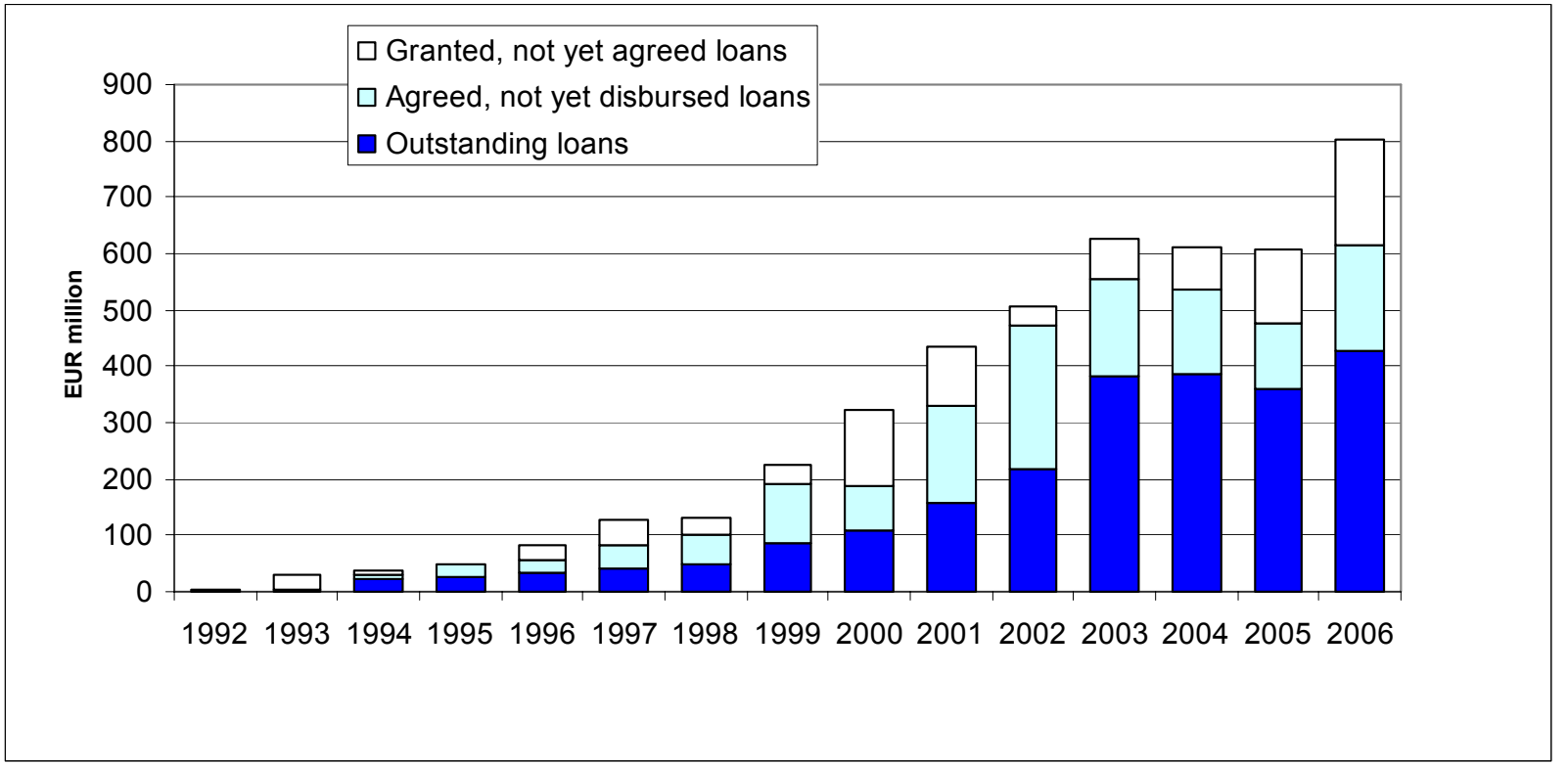
LOANS OUTSTANDING—NON-MEMBER COUNTRIES

Sectoral distribution as of 31 December 2006



- Energy, 27%
- Transport and communications, 29%
- Pulp and paper, 11%
- Other manufacturing, 6%
- Trade and services, 9%
- Food products, 2%
- Others, 15%

Lending to the Baltic countries



Lending to the Baltic countries

Loans outstanding, agreed and granted 31.12.2006

	ESTONIA	LATVIA	LITHUANIA	TOTAL
ENERGY	133.0	104.5	8.8	***246.4***
TRANSPORT AND INFRASTRUCTURE	160.0	28.7	22.1	***210.8***
MUNICIPAL INVESTMENTS	43.4	48.0	29.4	***120.8***
SOCIAL INFRASTRUCTURE	32.1	17.6	0.0	***49.7***
WATER AND SEWAGE	4.1	9.7	7.6	***21.5***
	372.7	**208.6**	**67.9**	***649.1***
MANUFACTURING	6.2	21.7	0.0	***27.9***
SME SUPPORT	10.4	79.5	4.0	***93.8***
OTHERS	0.0	31.5	0.0	***31.5***
Total	**389.3**	**341.2**	**71.9**	***802.3***
Of which environmental investments	*20%*	*13%*	*33%*	***18%***

VIA BALTICA

- 1000 km land route
- Integration of Baltic Sea economies and markets
- NIB coordinated Project Preparation in 90´s
- TEN Corridor 1
- 1st IP 1996 – 2000
  - EUR 214 mio.
- 2nd IP 2001-2006
  - EUR 553 mio.
  - Implementation in Baltic countries ongoing
  - Poland priority for 2006 onwards

NIB and Life Cycle Model PPP

- **E 75/A 1, Gdańsk-Nowe Marzy, PL, 90 km, EUR 675 mio.**
- **E18, Turku-Helsinki, FIN, 65 km, 25 y, EUR 700 mio.**
- **E 18, Helsinki-Lahti, FIN, 70 km, 15 y, EUR 100 mio.**
- **Arlanda Express Train, S, 40 y, EUR 500 mio.**
- **Norwegian PPP projects, EUR 830 mio.**
  - E 39 Orkdalsvegen, Klett-Bårdshaug, 30 km, 27 y, EUR 190 mio.
  - E-39 Lyngdal-Flekkefjord, 38 km, 27 y, EUR 180 mio,
  - E 18 Kristiansand-Grimstad, 38 km new road, 28 y, EUR 460 mio.
- **Oslo Toll System, N, 17 y, EUR 1,500 mio.**

MOTORWAY: HELSINKI-LAHTI

- First real PPP project with a limited recourse basis in Finland
- Construction completed 12 months ahead of schedule
- Concession with a maturity of 15 years
- Shadow toll – cashflow from state related to traffic volumes

LAHTI

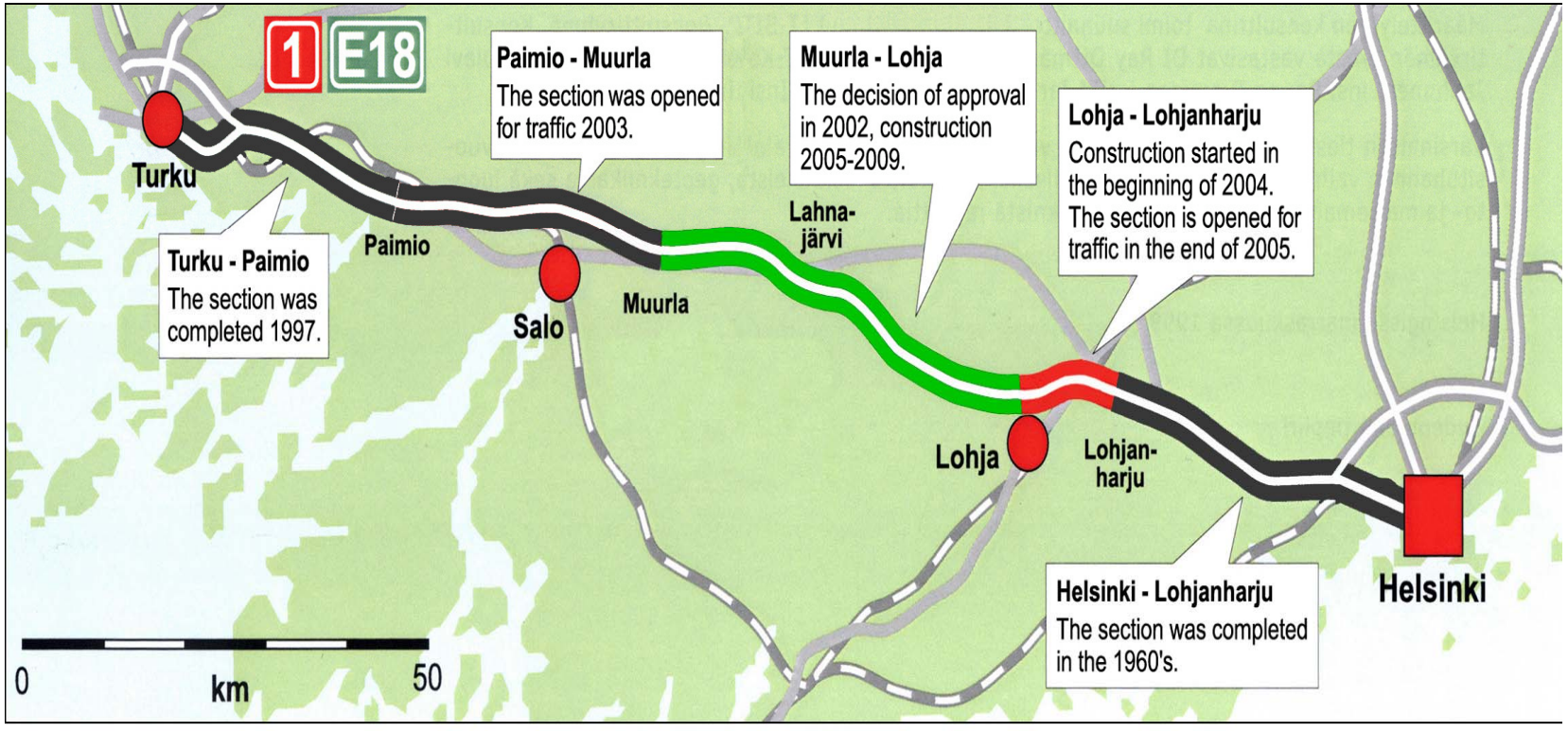
69,2 km

HELSINKI

Financing

Long term loans (15 years maturity)			
NIB-loan	EUR	42 mio.	
Sampo	EUR	42 mio.	EUR 84 millions
Equity			EUR 12 millions
Total financing			EUR 96 millions

Finland - E 18 Muurla - Lohja (50 km)
Part of Motorway Turku - Helsinki



E18 Turku-Helsinki

Finland E18 Muurla – Lohja

- Base Model for future PPP´s in Finland
- Design, Engineering, Construction, Maintenance and Financing
- Based on Government Decision in February 2004
- Difficult Project: 49 bridges, 7 tunnels (5.1 km), Noise barriers 28.1 km
- Concession 25 years starting from concession contract
  - Skanska (S), Laing Roads (UK), Lemminkainen (Fin)
- Short Tendering Phase < 2 years
- Payment Criteria in conformity with Eurostat 2004:
  - Availability (Condition of surface and maintenance)
  - Performance and Durability
- Financing < EUR 700 million: NIB, EIB and Commercial banks
- Special Tax Law set up for Project

The Norwegian Road Program

- **National PPP Transport Program**
  - February 2001: The Parliament approves three road projects. Aims to test efficiency and effectiveness in achieving political objectives through the PPP model.
- **White Paper to the Parliament based on:**
  - Approved development plan and EIA
  - Calculation of investments costs
  - Calculation of operation and maintenance costs
  - Estimates of annual payment to the PPP Company
  - Financing plan based on toll income and state budget funding

The New Norwegian PPP Transport Projects developed by State Road Administration

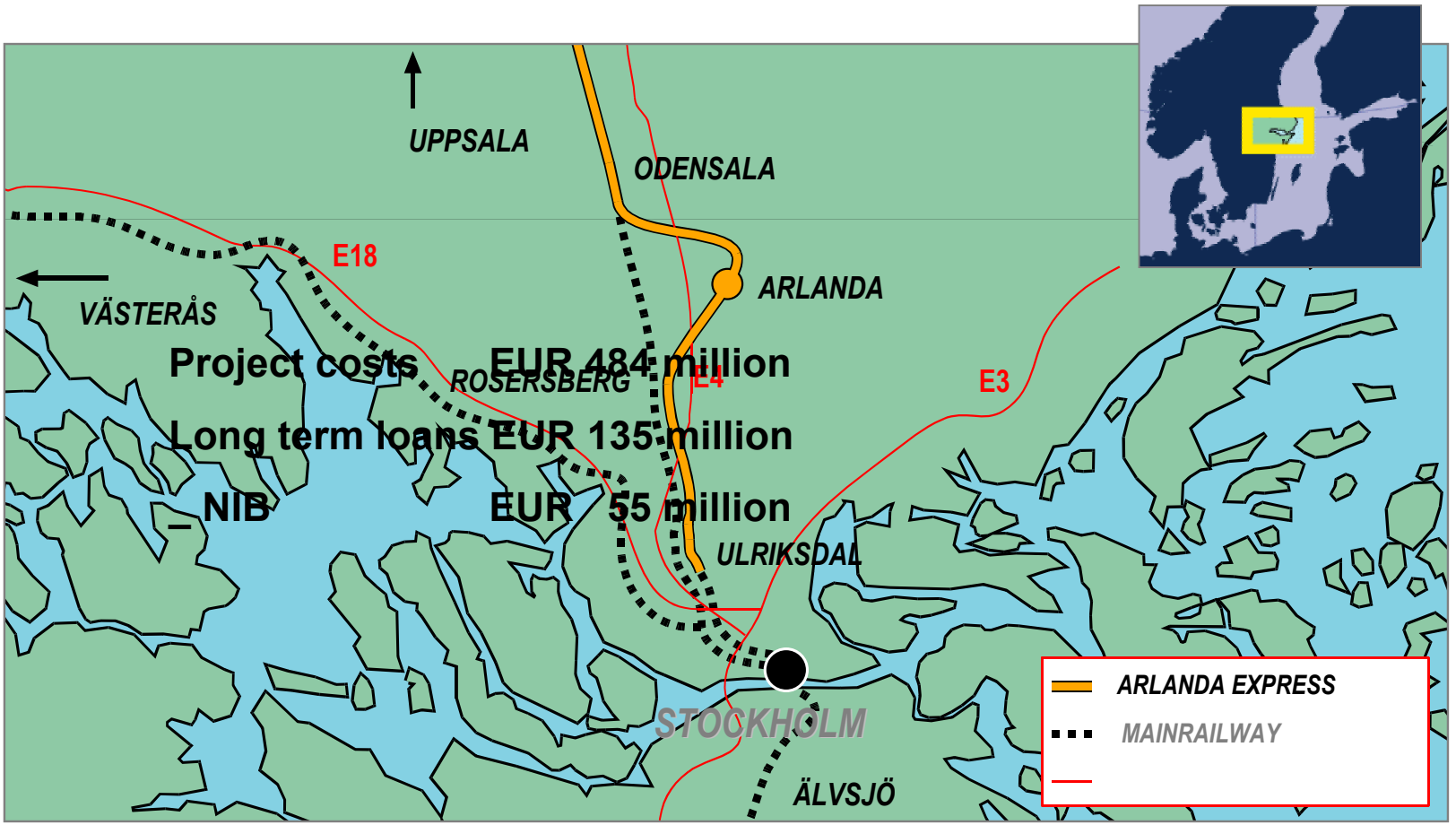
- **E 39 Orkdalsvegen (EUR 170 million)**
  - **NIB-loan EUR 40 million**
- **Road network around Tönsberg and surrounding municipalities (EUR 330 million)**
  - NIB-loan EUR 40 million
- **Allfarveg, Lyngdal-Flekkefjord west of Kristiansand city (EUR 180 million)**
  - NIB –loan EUR 40 million
- **New Project: Kristiansand-Grimstad (east of Kristiansand)**
  - 38 km new road
  - Tendering 2005/2006

ROAD TOLL SYSTEM IN OSLO

- Objective – to improve traffic system in the greater Oslo area
- Project company, A/S Fjellinjen, Oslo
- Project implementation period 1990 – 2005/2007
- PPP-financing structure selected to accelerate the implementation of road infrastructure in Oslo
- Financing

- NIB loans	EUR 70 million
- Other loan financing	EUR 180 million
- Total investment costs	EUR 1.5 billion

ARLANDA EXPRESS – 45 Year Concession



Poland - Motorway from Gdansk-Nowe Marzy
Part of European Corridor VI

- 90 km shadow toll motorway
  - Completion 2008
- 35 years concession
  - SPC: GTC (Skanska, Intertoll, NDI and Laing Roads)
  - Construction, Maintenance, Financing, Actual Toll Collection
- Income mechanism combines the quality and quantity of services produced
  - Guaranteed Basic Payment
  - Additional traffic based “Shadow Tolls” – not covering all project expenses
  - **Full flexibility for toll fee structure at Polish state**
- External Financing (30 years 10 grace)
  - NIB EUR 140 million (21 %)
  - EIB EUR 500 million (74 %)

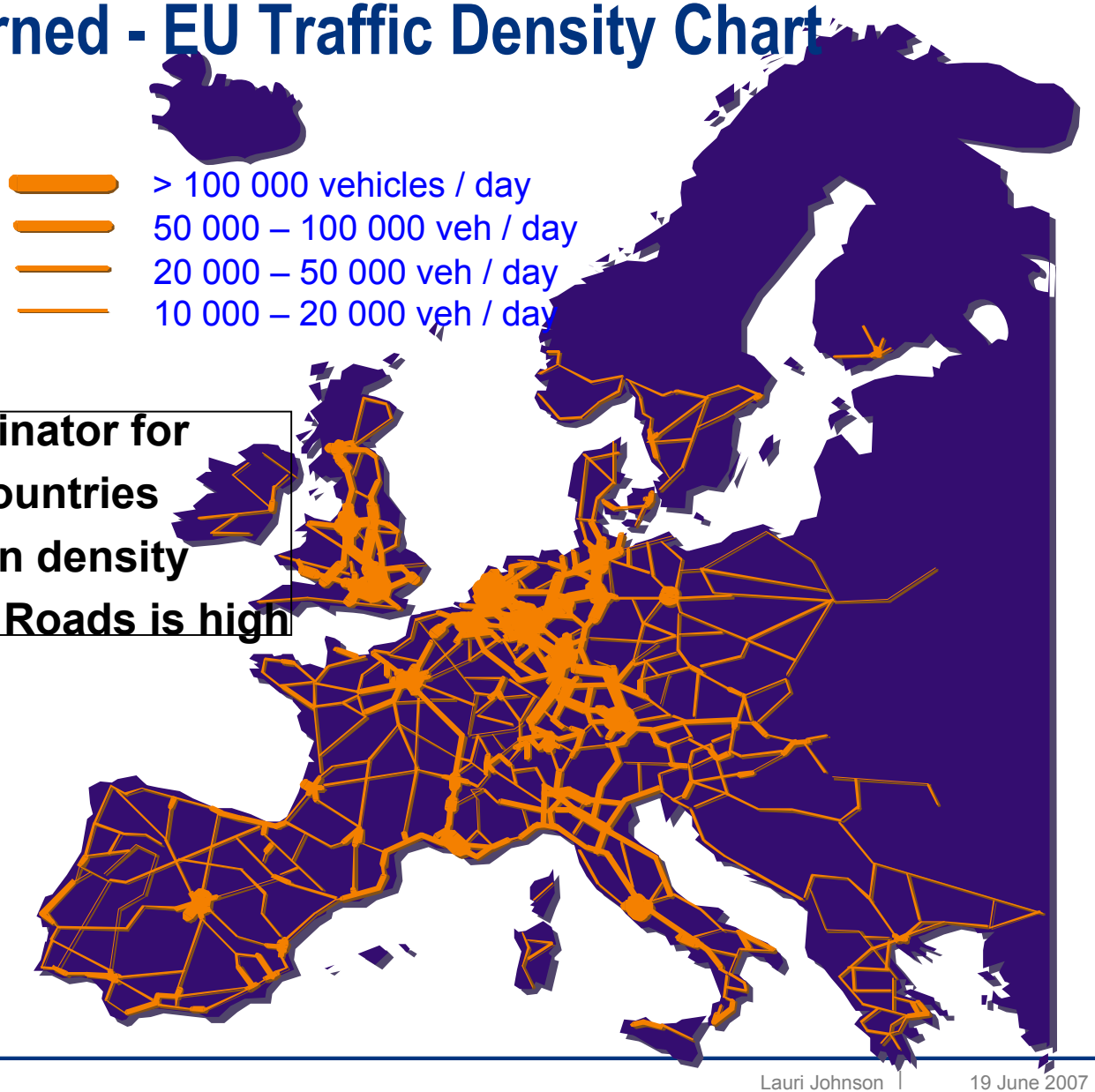
A1 Gdańsk-Torun Main Schedule

- **Tendering**
  - Based on Toll Motorway Act, dated 27.10.1994
  - Prequalification to tender March 1996
  - Invitation to tender 4.10.1996
  - Concession granted on 25.8.1997 to GTC for 35 years, in 2004 extended to 2039
- **Concession Agreement signed 31.8.2004.** Amended 28.7.2005
- **Financial Close 30.9.2005**
- **Construction 2005-2008**
- **Concession ends at 2039**
- **Phase II** Nowe Marzy-Torun (60 km),
  - Vital for viability of A1
  - Government of Poland declared its commitment to implement

NIB has financed port investments in:

- Port of Tallinn, Estonia
- Port of Riga, Latvia
- Port of Klaipeda, Lithuania
- Turku, Finland
- Naantali, Finland
- Mariehamn, Finland
- Port of Aahus, Denmark
- Port of Rönne, Denmark
- Port of Gothenburg, Sweden
- Port of Hargs, Sweden
- Port of Bodö, Norway

Lessons Learned - EU Traffic Density Chart



Common denominator for Nordic/Baltic countries

= Low population density

Risk related to Toll Roads is high

- **PPP is a method to make public service more efficient**
  - Design, Construction, Operation & Maintenance, Financing

- **Toll versus "Shadow Toll"**
  - Nordic PPP structures are based on various ”shadow toll” models
    - Same for Polish A1
    - Shadow toll
      - Financial risk not on Project Cash Flow > reduction of financing costs
      - Enables flexibility in toll levels > optimum traffic levels
      - Financing costs substantially lower than for Toll Roads
  - Indirect undertakings from public sector necessary

- **Risk allocation**
  - Public sector to clarificy of responsibility between parties involved before tendering

Lessons Learned - Common Approach of NIB financed PPP´s

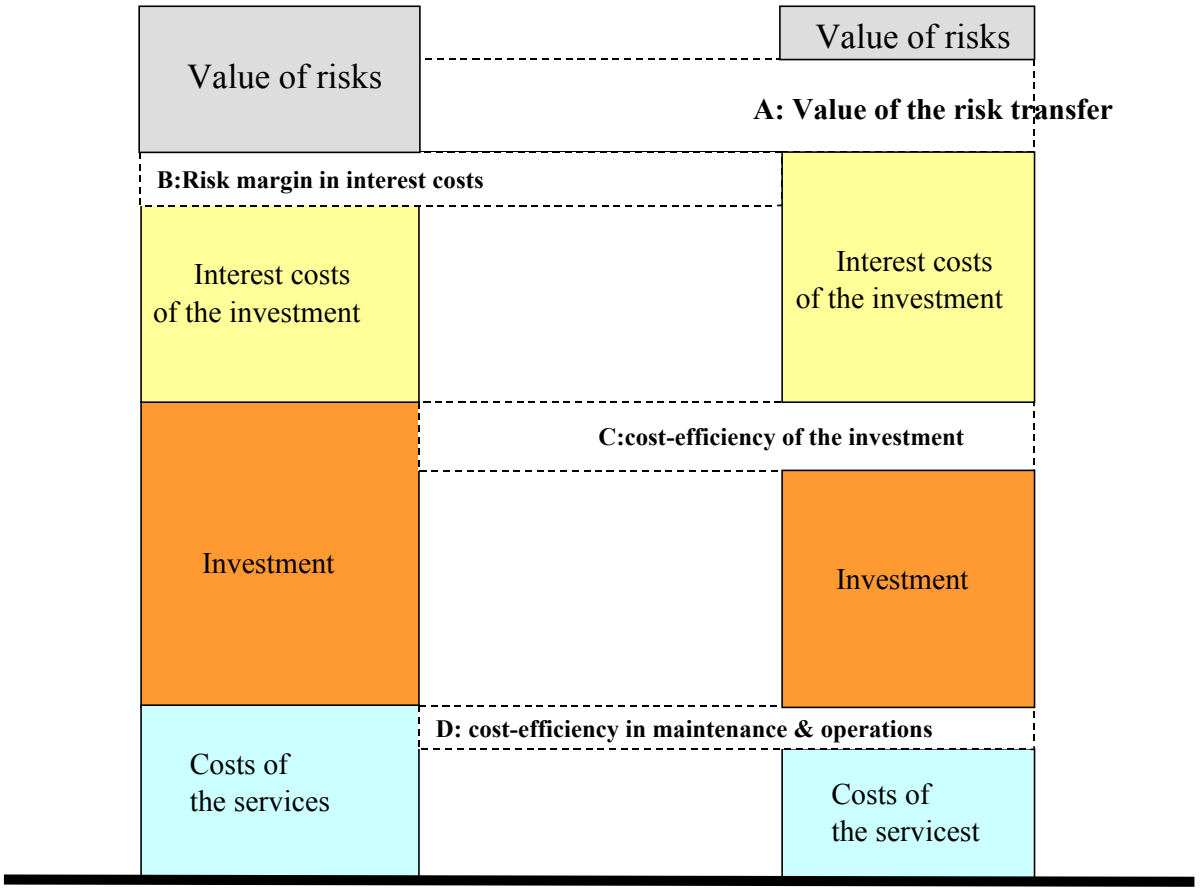
- **No full Commercial Risk for Concessionaire/Banks**
  - Cash flow elasticity big > risk premium too high
    - EU new member countries low income,
    - Nordic countries small population
- **Risk transferred to Concessionaire**
  - Completion risk
  - Availability risk
  - Part of Commercial Risk (Arlanda Express Train)

  ► Structure as such also aimed at fulfilling "Eurostat 2004" criteria for not recording debt as state debt - final decision by Country involved
- **Cash flow risk at Public Sector**
  - Concessionaire may collect toll on behalf of Public Sector
  - Public sector has flexibility in deciding and maintainng proper toll level

PPP versus Traditional Source: Finnish Road Administration

Traditional *LCC*

$$Savings = A + C + D - B$$



PPP versus Traditional Public Implementation

- **Value of the Risk Transfer**
  - In a public project public sector takes full completion risk
  - In a PPP project Concessionaire takes completion risk after assessment (incl. tentative insurance)
- **Risk Margin in Interest Costs**
  - state budget funding cheaper than private funding
- **Cost-Efficiency of the Investment**
  - Concession (covering Construction + O&M) requires Concessionaire to optimize total costs. In traditional construction and O&M separated = no optimisation.
    - ⇨ PPP implementation cheaper than traditional.
  - PPP implementation seem to be faster than traditional
- **Cost-Efficiency in Operation & Maintenance**
  - PPP implies minimized life time costs. These are lower than the sum of annual costs in traditional O&M.

Real Case Finland E 18
PPP versus Traditional

Implemented with the life-cycle contract, the construction costs of E18 Muurla–Lohja motorway will be approximately EUR 50-60 million lower than those incurred in a design and build contract. Furthermore, the completion time of the life-cycle contract is two years shorter, which brings substantial benefits.

Rakennusteollisuuden Viestintäkeskus Oy 2006

Source: Finnish Road Administration

Lessons Learned -
General Environment Requirements for PPP´s

Political clearance

- **Legal framework to be in place**
- **Strong Political Support for Implementation and Financial Close in advance of tendering**

Lesssons Learned - Environment for Implementation

Tendering

- **To be based on existing legislation**
  - legal, technical, accounting rules to be in place in advance of tendering, if necessary changes in legislation!
- **Marketing of tendering important**
  - Real competition key criteria for successful PPP project
- **To keep up competition until financial close**
  - Prequalification
  - Negotiations

Institutional Capacity

- **International co-operation in between National Road Authorities to be improved**

- **Increased international coordination of PPP structures implies**
  - Stronger Institutional Capacity
  - Easier for Private Sector to understand
    - ►increased competition (bidding & transaction costs lower),
    - ►lower project costs,
    - ►increased effectiveness

Northern Dimension Transport and Logistics Partnership

- 24.11.2006 during Finnish EU Presidency: New Northern Dimension Policy Framework Document (effective as of 1.1.2007) was approved making the Northern Dimension a common policy between the EU, Russia, Norway and Iceland

- Autumn 2007: ND senior officials to examine the desirability of a Northern Dimension Partnership on Transport and Logistics (Baltic Sea Area and Barents Sea Area.
  - To increase competitiveness of NDTLP Area
  - NDTLP would accelerate the implementation of large projects and facilitate the approval process of smaller ones

- 15.6.2007 NIB invited to Expert Meeting in Brussels

- Final decision expected during Portuguese EU Presidency II/2007

able 1: Government-funded Transport infrastructure and equipment investment planned till 2013 by sub-sectors; Millio of euro. Sources: Relevant Ministries and other public sector data.

	Rail	Road	Maritime & ports	Air	Total
Poland	6 000	23 000	1 000	1 000	31 000
Sweden	12 000	16 400		400	28 800
German BSR-States	5 500	4 367	6 200	0	16 067
NW Russia	1 200	4 500	2 000	400	8 100
Finland	500	1 300	350	350	2 500
Norway	200	1 464	72	140	2 237
Latvia	550	800	320	525	2 195
Estonia	392	1 123	155	80	1 750
Lithuania	704	694	123	53	1 574
Denmark	n.a.	1 020	n.a.	n.a.	1 020
Iceland	n.a.	n.a.	n.a.	n.a.	300
BSR region total	**27 046**	**54 668**	**10 220**	**2 948**	**95 543**
Share of total	***28 %***	***57 %***	***11 %***	***3 %***	***100 %***

Figure 1: An indicative division and order of magnitude of Government-funded transport infrastructure and equipment vestments in the Baltic Sea Region in 2006-2014. The line indicates estimated investment volume in 2003-2005. Excludi municipal and private sector investments Source: The author's estimate based on available plans and time-frame from Ministries.

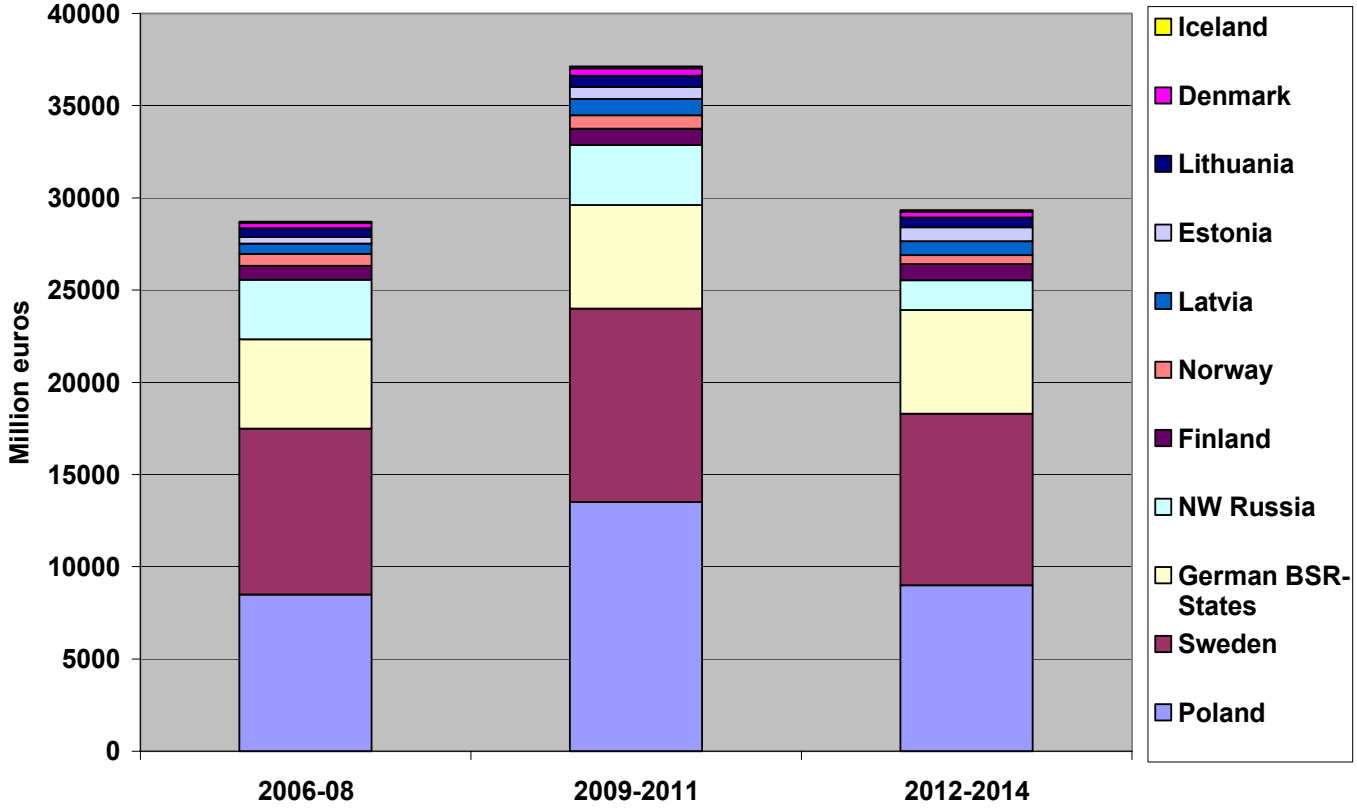
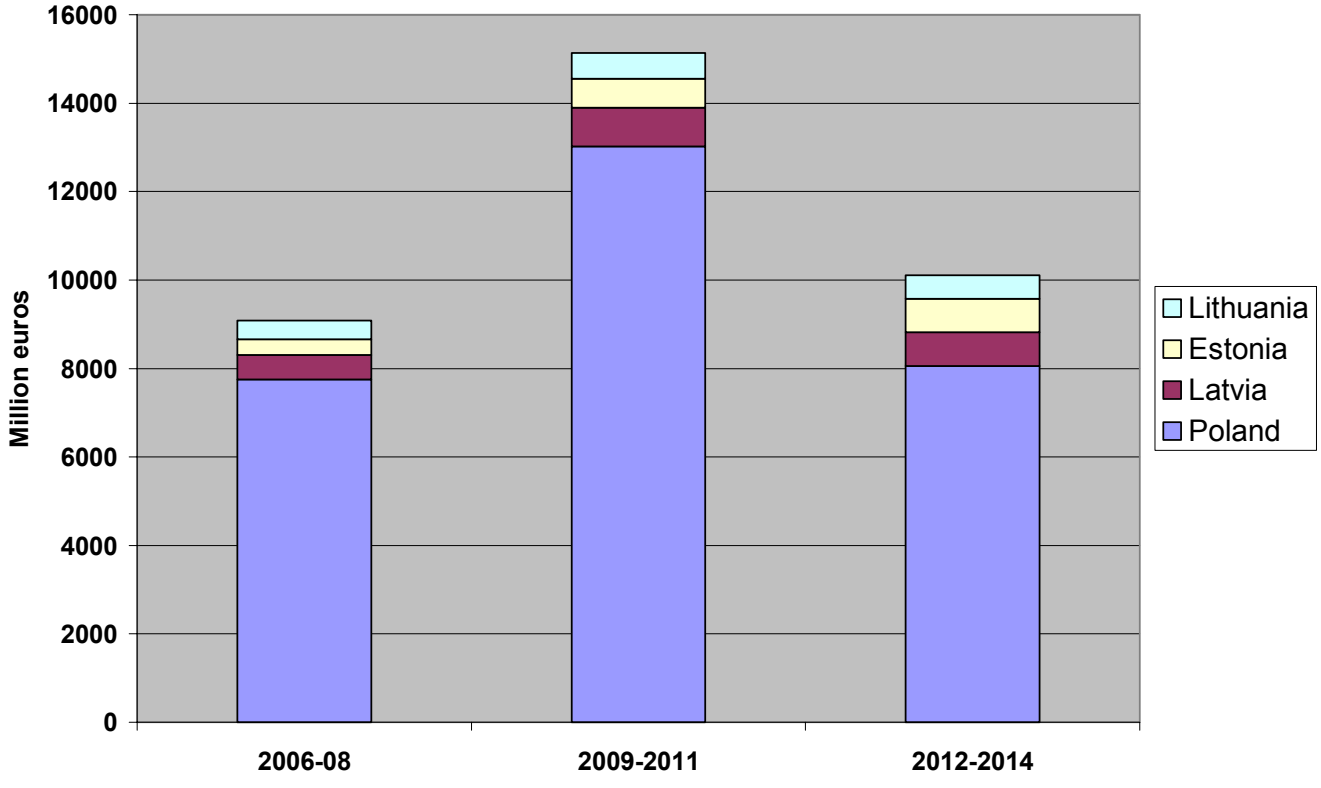


Figure 2: An indicative division and order of magnitude of Government-funded transport infrastructure and equipment vestments in Poland, Estonia, Latvia and Lithuania in 2006-2014. The line indicates estimated investment volume in 200 2005. Excluding municipal and private sector investments Source: The author's estimate based on available plans and time-frame from Ministries.

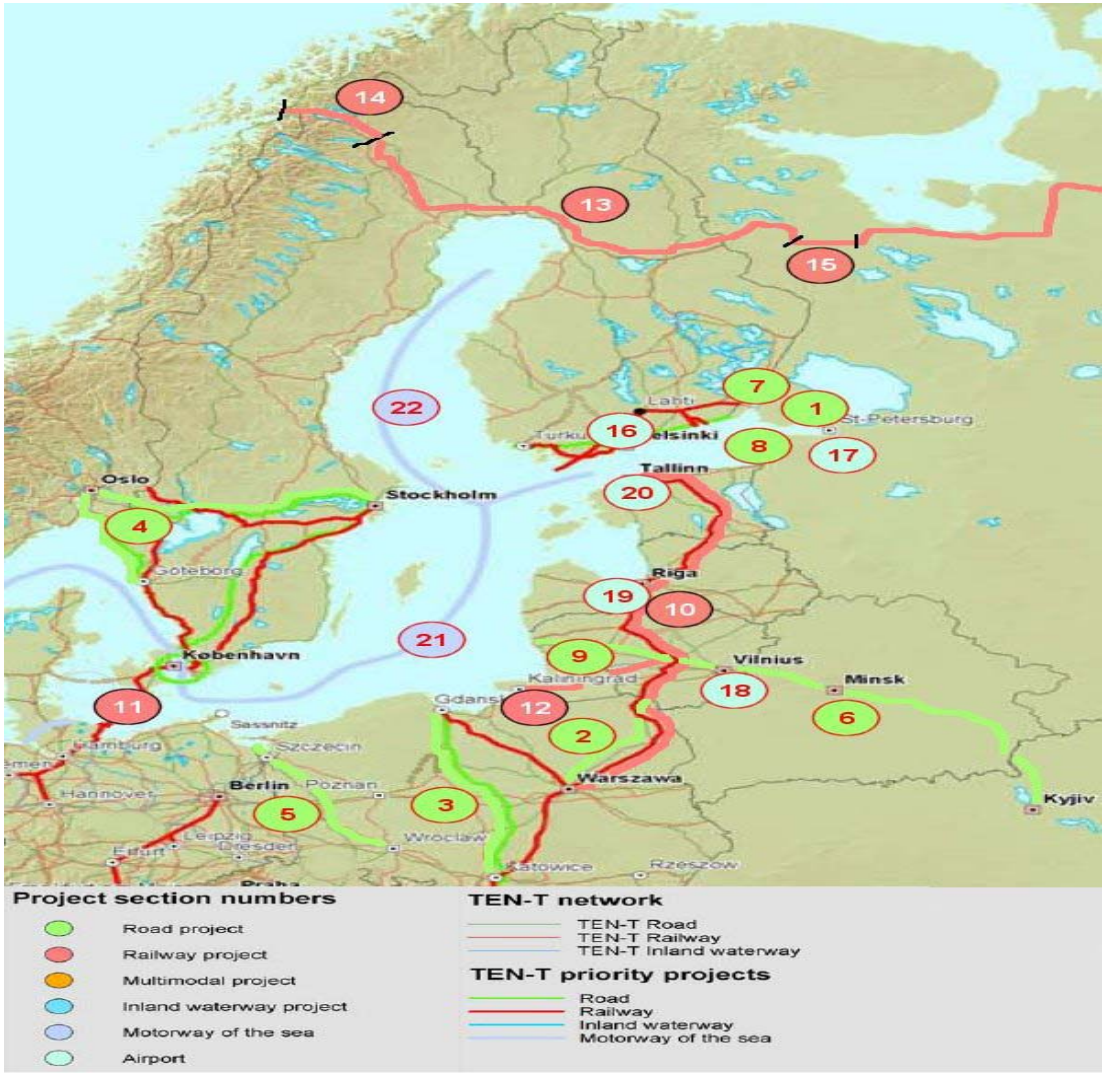


ble 2: The non-exclusive and indicative list of Transport infrastructure investments till 2013 fulfilling the search criteria this survey.

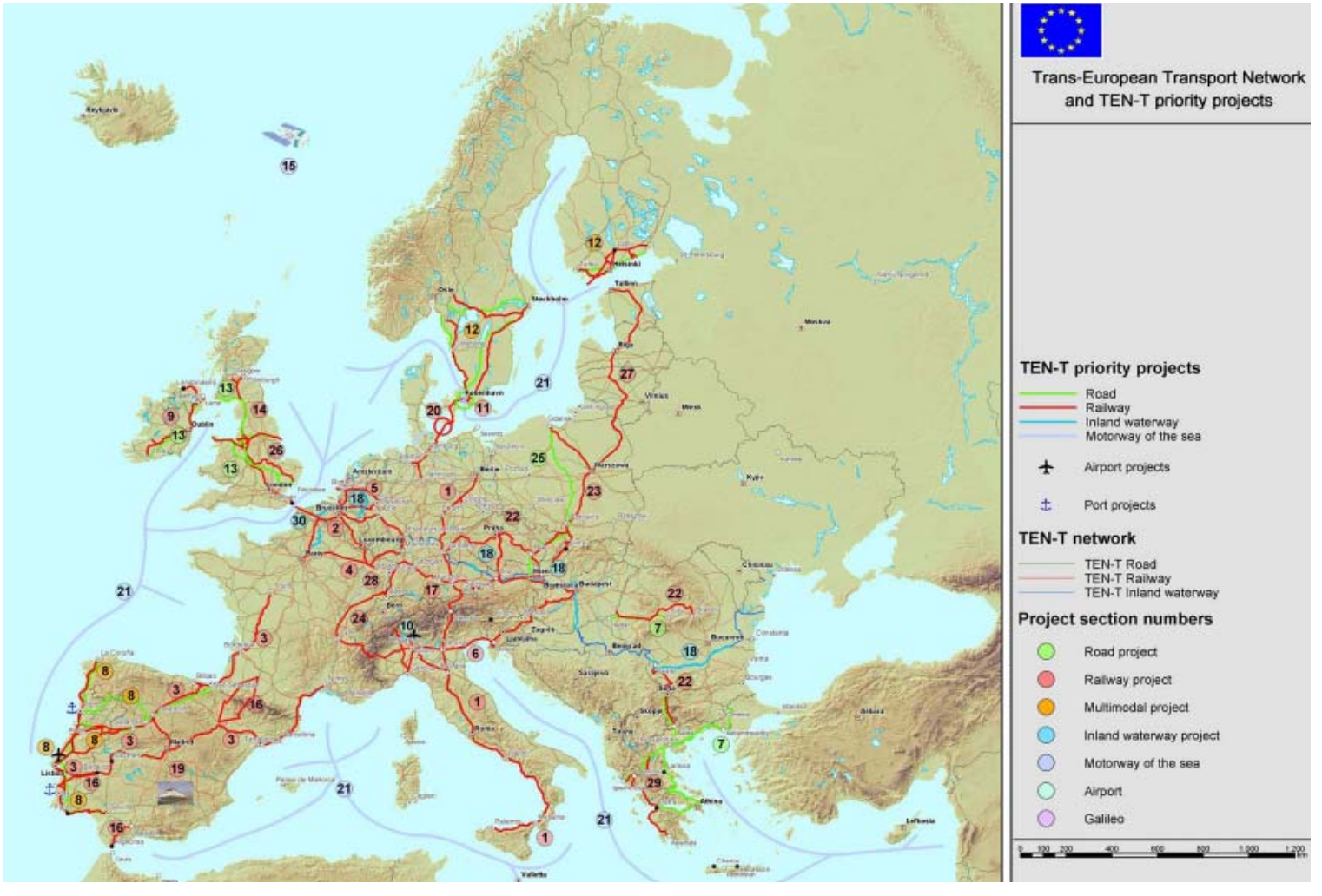
urce: Author's analysis based on information received from national authorities

No. in Map	Identified Transport Infrastructure Projects fulffilling the given criteria 2007-2013	Mode	Directly affected countries	Estimated cost, Million €	PPP potential
1	WSHD road in St. Petersburg	Road	RU	2500	yes
2	Via Baltica in Northeastern Poland	Road	PL, BSR	500+	
3	A1 Motorway completion from Gdansk	Road	PL, BSR	500+	yes
4	E6 (Gothenburg) and E18 (Stockholm), Norway	Road	NO, (SE)	400+	
5	S3 Swinoujscie - Szczecin- Wroclaw	Road	PL, (DE, SE)	300+	maybe
6	IXB Corridor Kiev-Minsk-Vilnius-Klaipeda	Road	LT,BA,UA	200+	
7	Border-crossing in SE Finland and NW Russia	Road	FI, RU	100+	
8	St. Petersburg-Tallinn road	Road	EE, RU	n.a.	
9	Bridge to Sovetsk (Kaliningrad)	Road	LT, RU	20+	yes
10	Rail Baltica	Rail	LT, LV, EE, PL	n.a.	maybe
11	Fehmarn Belt- related projects	Rail	DE, DK	2000+	Yes, bridge
12	IXD Corridor Kaunas-Kaliningrad	Rail	LT,RU	100+	
13	Barents Link; Northern East-West Corridor	Rail	RU, FI, SE, NO	500+	
14	Kiruna-Narvik rail improvement	Rail	SE, NO, (FI, RU)	200+	
15	Ledmozero-Kotschkoma rail link	Rail	RU (FI, SE, NO)	n.a.	
16	Helsinki-Vantaa airport enlargement	Air	FI	250+	
17	St. Petersburg (Pulkovo) airport development	Air	RU	200+	
18	Vilnius airport enlargement	Air	LT	150+	
19	Riga airport enlargement	Air	LV	80+	
20	Tallinn airport and runway enlargement	Air	EE	40+	
21	Motorway of the Sea projects	Maritime	BSR-wide	n.a.	yes
22	Icebreaker investment(s)	Maritime	EE, RU, FI	50+/ship	maybe

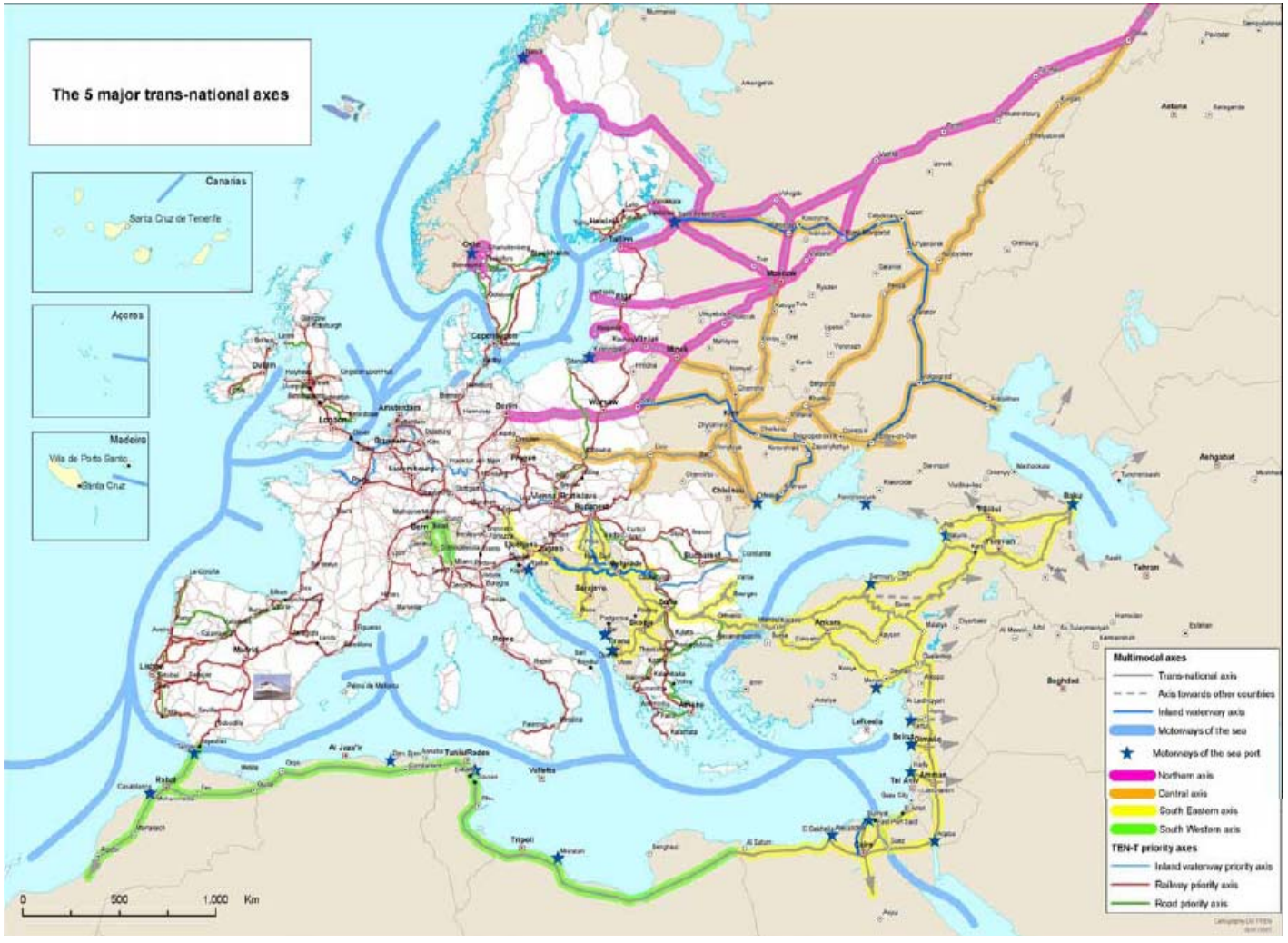
Figure 4: The identified 22 potential projects placed on a TEN-T priority project map; list of projects is shown in Table 2



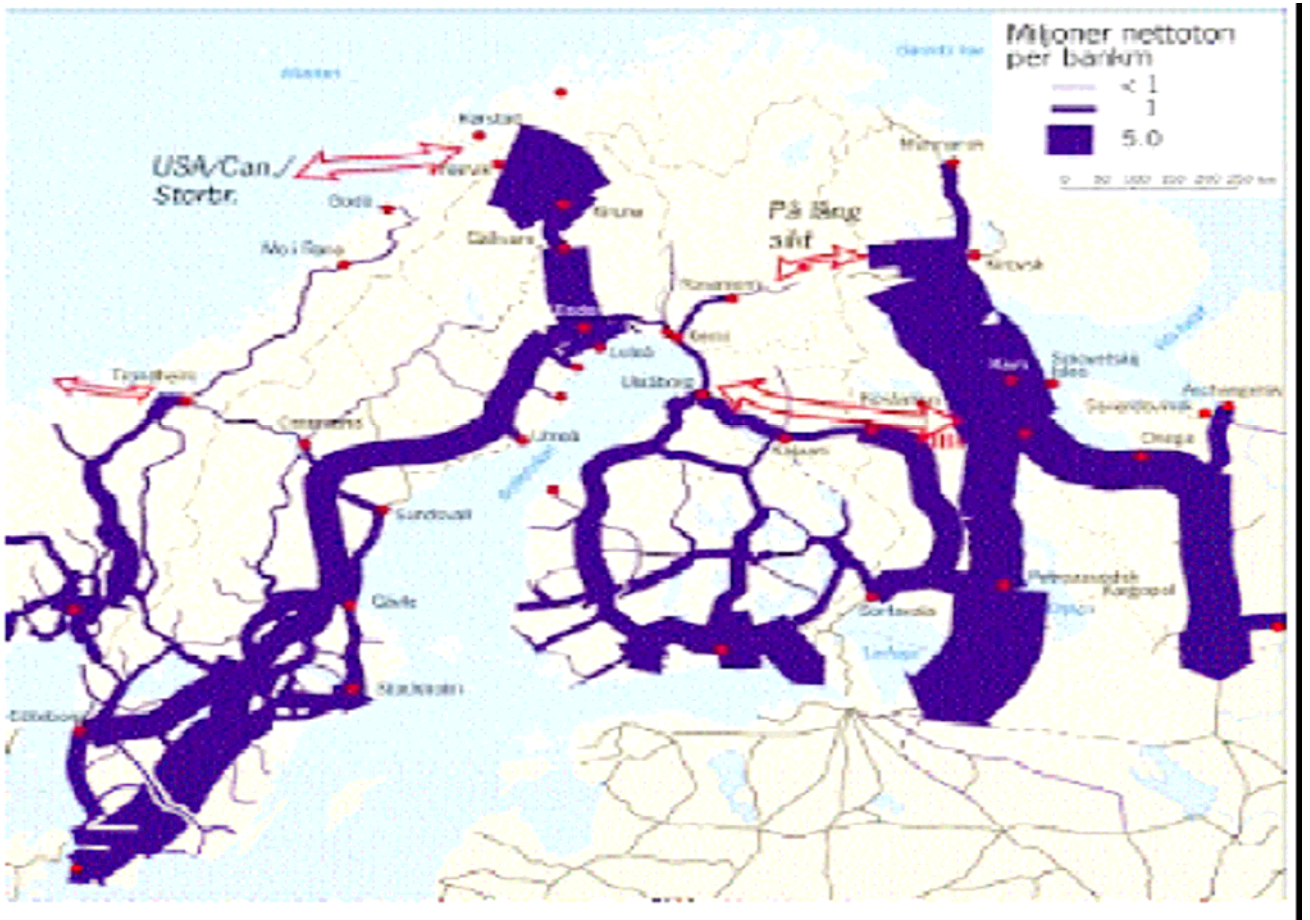
ATTACHMENT 2: TEN-T Priority Projects in 2004. Source: EC, DG TREN 2004



ATTACHMENT 3: High Level Working Group Map of key European Transnational Axes, EC; COM(2007) 32 Final

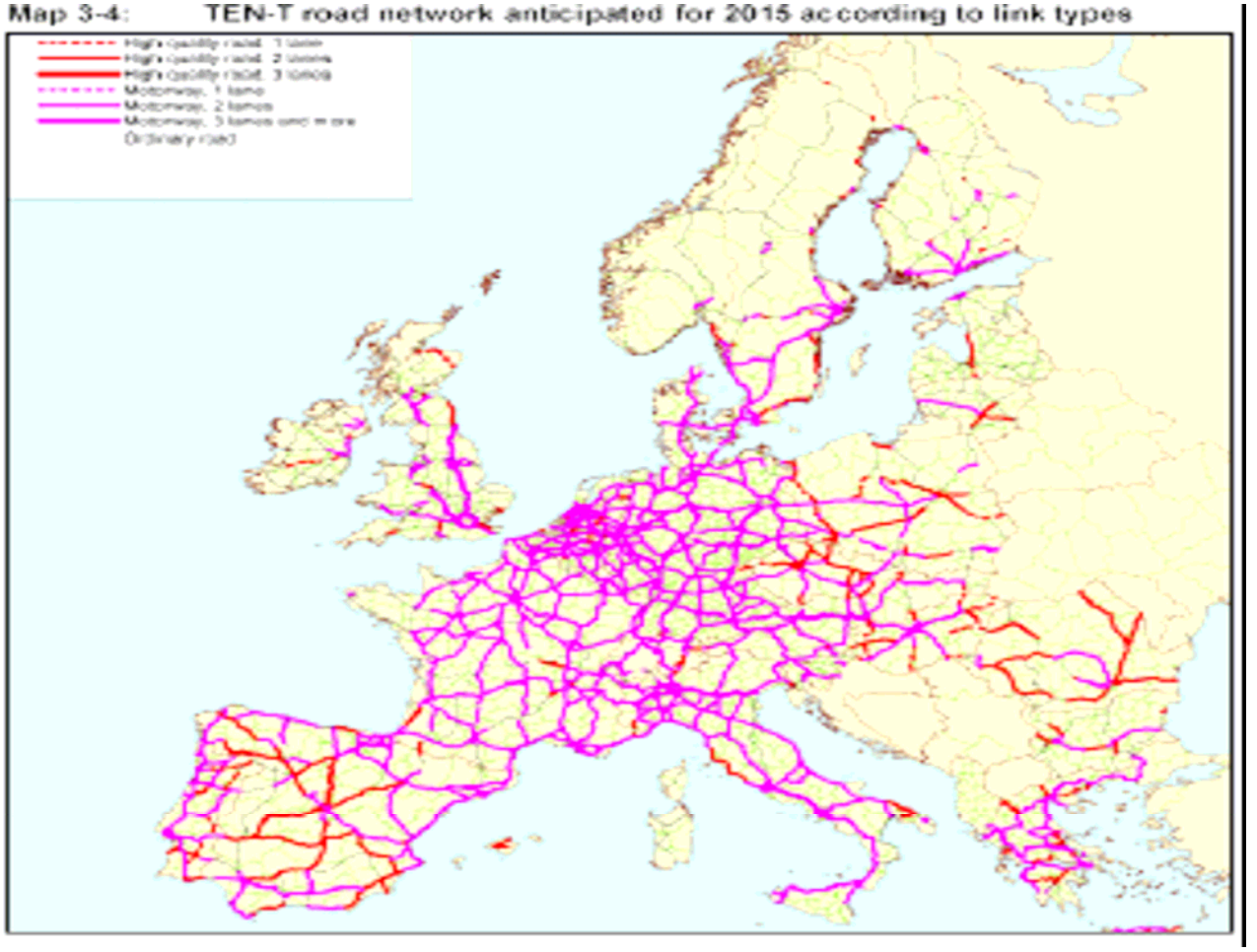


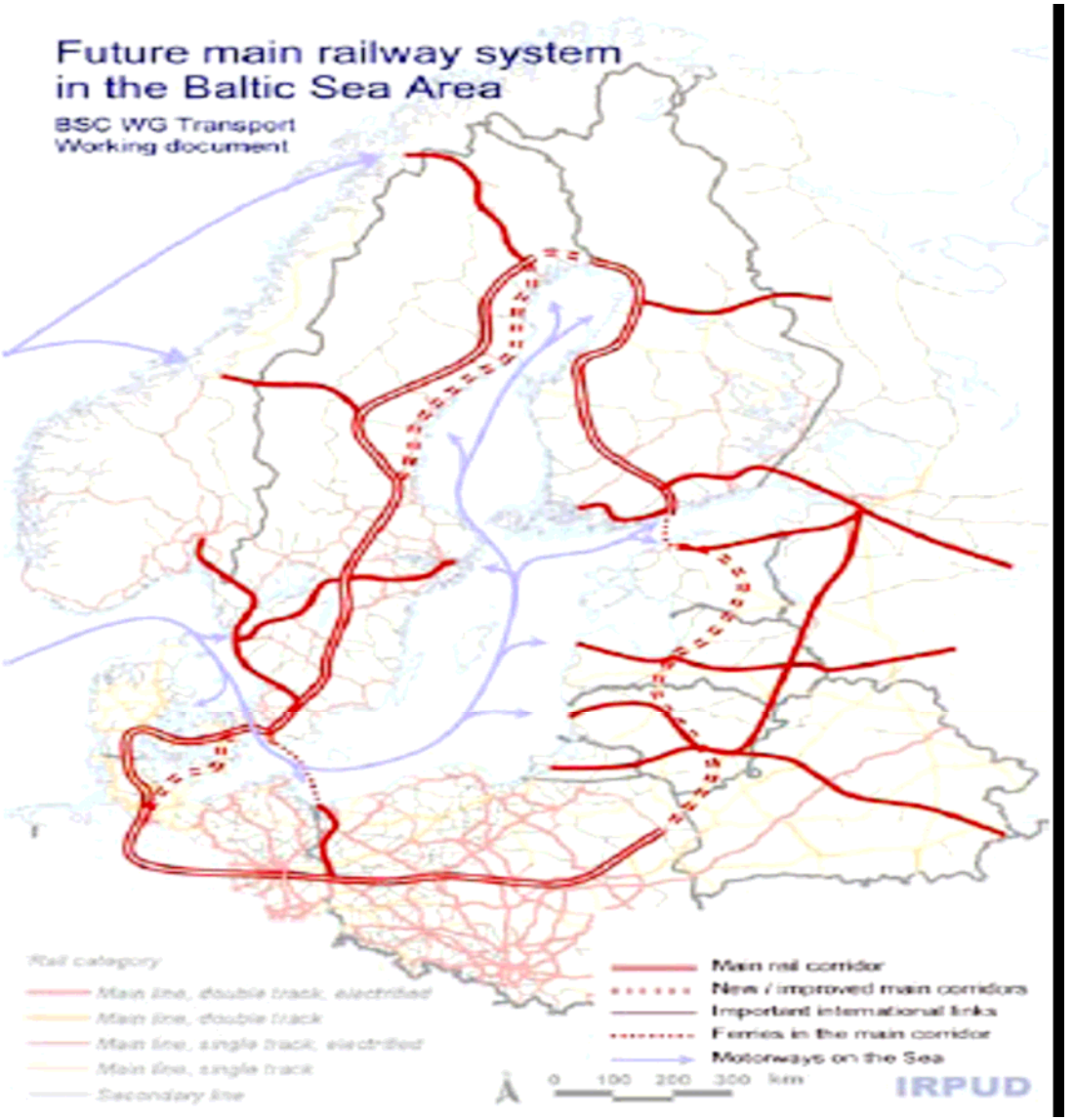
Rail Transports 2000



Source: Swedish Rail Authority

EU Future Road Network




Future main railway system
in the Baltic Sea Area
BSC WG Transport
Working document
Rail category
Main line, double track, electrified
Main line, double track
Main line, single track, electrified
Main line, single track
Secondary line
Main rail corridor
New / improved main corridors
Important international links
Ferries in the main corridor
Motorways on the Sea
0 100 200 300 km
IRPUD